DARWin-ME
Pavement Design Software

Update to the JTCoP
May 2009
Current Software

- DARWin 3.1 is the latest software version of the 1993 AASHTO Guide for Design of Pavement Structures
- Current Contractor
- Sunset planned for December 2011 which is 12 months following the expected release of DARWin-ME v2.0.
DARWin-ME Development

- Intellectual property rights transferred from NCHRP to AASHTO – December 2007

- Project development is in two parts:
  - Part 1 – MEPDG Research Software Maintenance
  - Part 2 – DARWin-ME v2.0 Development
Part 2 – DARWin-ME

- Based on the MEPDG
- List of enhancements (not an extensive list)
  - Increase computational speed
  - Ability to optimize for thickness design
  - Inclusion of backcalculation results for rehab design
  - Ability to establish agency specific libraries (materials, traffic, climate)
  - SI Units capability
  - Incorporation third party traffic data
  - Traffic analysis based on Highway Capacity Manual
  - Validation checks during data input
DARWin-ME Current Status

- Project solicitation issued in July 2008
- Received commitments from 20 member agencies and the FHWA.
DARWin-ME Development

- Sole Source Contract to ARA
  - Correct known bugs and those discovered during development
  - Incorporate enhancements outlined in solicitation

- Product development schedule
  - Appointed new DARWin-ME Task Force – February 2009
  - Kick-off Meeting with contractor – June 3-4, 2009
Role of Task Force

- Assist AASHTO Program Manager (Ms. Vicki Schofield) with monitoring development of v2.0
- Review and test beta software
- Recommend licensing fee structure to AASHTO
- Plan for future versions of DARWin-ME
DARWin-ME Task Force Members

- Judy Corley-Lay (Chair), North Carolina
- Marta Juhasz, Alberta, Canada
- Jay Goldbaum, Colorado
- Dave Andrewski, Indiana
- Williams F. Barstis, Mississippi
- J.F. Bledsoe, Missouri
- Julian Bendana, New York
- Madgy Mikhail, Texas
- Trenton Clark, Virginia
Opportunity for Enhancements

- Upon successful release of DARWin-ME v2.0
  - All member agency licensees who participated in the solicitation will have the opportunity to obtain source code
  - Agreements with AASHTO will apply
  - Allows for state enhancement with the intent that it will be shared with AASHTO
    - AASHTO Joint Technical Committee on Pavement intent to maintain one official version of software